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The Lincolnshire Naturalist

Volume 28 Part 1a

Transactions of the Lincolnshire Naturalists' Union

for 2011 published 2012

Fixed-point Photography.

Field Meetings 2011

Transactions of Lincolnshire Naturalists' Union 2011

Editorial

Phil Porter

Welcome to the first of a new volume of The Lincolnshire Naturalist. This is the first that I have produced after taking over from Nick Tribe who has put in a long stint of editorship and should be congratulated on the results. Having obviously not seen a final printed draft copy yet, I can only trust that the standard that he set will be maintained. A few of you will know that I have encountered some difficulties, being new not only to the job, but also to the publisher programme which for a tyro, can be hard to handle. The trials of the technical side has, from time to time, detracted from the very careful editing that needs to be done. If you do find the odd imperfection, I hope you will be tolerant, at least for this year.

The first difference that you will notice is the fact that there are two books! This was necessitated by two submissions. The nature of Barrie Wilkinson's excellent Presidential address ,'Fixed Point Photography' required that a large number of photographs needed to be reproduced at a reasonable size. This took up lots of page space, as did Jeremy Fraser's extensive account of 'Botanical Assessment of Watercourses in the Isle of Axholme', the first substantial piece on botany that has appeared for some time. There is a limit to the number of pages that can be stapled to form a book and this was comfortably exceeded. The two books begin with the Presidential address and are paginated from there through to the end of the articles and reports in the second book.

My thanks are especially due to the people who submitted in good time for editing. This is a process I will wish to begin in 2013 long before I did this year as the amount of 'fiddling about' on the computer with tiny details has to be experienced to be believed. Yes! You can see some pleas on the horizon! It would save a lot of anxiety if reports were in by the beginning of July. Another thing to remember is to supply pictures where possible; they might not all be used but they add to the attraction of the publication and the adjustable size of a picture is very useful in making, or taking up, space in the publication. These pictures should be attributable and with permission for use from the owner and at about 200-300 dpi resolution.

The reports are very exciting this year as usual and we are in the position of dealing with an impressive breadth of disciplines. I hope you all enjoy this book. The length of some of the articles must not put off members with some interesting small points to make. These are also useful to make the most of the space available. I hope I will see some two paragraph accounts from new contributors next year.

BARRIE WILKINSON — LNU President 2011

Ian Macalpine-Leny

Barrie Wilkinson started to help with the Bird Observatory at Gibraltar Point when he was an apprentice electrician in 1954. When he returned from National Service he became "ringer in charge" at the Observatory in addition to his day job as an electrician. He joined the Lincolnshire Wildlife Trust in 1965 as a Research Officer and became the Trust's full time Field Officer in 1976. He retired as Reserves Manager in 2002 with responsibility for coordinating management of the Trust's 100 reserves.

FIXED POINT PHOTOGRAPHY

Barrie Wilkinson

It was in 1955 when I was 18 that I first became interested in photography and I acquired my first camera. It was nothing very special, an old pre-war box camera, and prints from it would have been pretty awful as nothing has survived. I know I found clouds fascinating and tried to capture them on print with dismal results. A couple of years later when I had a slightly more modern camera, Mastin's Camera Shop in Skegness advised me to buy a yellow clip-on filter. This had the effect of darkening the blue sky on black and white film and revealing the clouds. Later that year (1957) I joined one of Ted Smith's evening class outings to Wicken Fen nature reserve. It was a lovely sunny day with fair weather clouds, and I used all 12 exposures of my film - with the yellow filter of course - and some of the results were a revelation with beautiful clouds against a darker sky. The prints confirmed my interest in photography and spurred me on to buy a Dacora folding camera which went with me to Cyprus when I was doing my national service. I then progressed to my first 35mm camera in 1962, a Voigtländer, and then settled with a Pentax single lens reflex camera in 1964. With this, and its successor, I took all my colour photos on Trust reserves until going fully digital in 2004.

(Photo: Keith Pocklington)

Something happened early on which started me thinking about using photographs to record change. I attended Ted Smith's evening classes in Skegness from about 1955. Talking about plants one evening and how their flowering periods varied from year to year, one lady said "I wish I had taken a photograph of my garden on the same date each year to record when the daffodils flowered". That gave me the germ of an idea, but it was not until the early 1980s when Peter Roworth was Mid-Lincs Warden at Moor Farm that the words 'Fixed Point Photography' first came my way. Peter was already well into this method of recording habitat changes and had set up a system of fixed point positions at Moor Farm and Kirkby Moor, some of which I still use today.

It was 1994 before I got my act together. Initially I looked through my collection of slides of Gibraltar Point and Saltfleetby-Theddlethorpe Dunes and then other reserves which, as part of my job with the Trust, I had been visiting for some 20 years. I picked out those views which, when I went back to the reserve, I thought I could find again. I also looked through the Trust's vast collection of slides and selected those that could be useful. I had prints made from the slides and went out to various reserves with my camera to relocate the original position from which the photograph was taken and took a new shot from that point. Those would form the basis of my fixed points and I would supplement them with new ones where I thought changes might take place or where there had been recent management such as scrub clearance. I thus built up a system of fixed point positions for each reserve which were marked on 1:2500 maps with an arrow showing the direction the shot was taken. On one or two reserves like the former arable lands of the Red Hill and Scotton Common extensions and new reserves such as Willow Tree Fen, I had a free hand to set up new fixed points. The difficulty is trying to judge where the greatest changes will take place, but hopefully enough good ones have been established and others can always be added later.

I now take fixed point photographs on 26 reserves and three of these – Gibraltar Point, Saltfleetby-Theddlethorpe and Scotton Common – have sub-systems within them. I visit most sites to retake photographs every 3-4 years except at Gibraltar Point (Mere and dunes off North Building), Scotton Common (the old heath) and Little Scrubbs Meadow (though no longer a Trust reserve) where photographs are taken annually.

When Peter Roworth set up his fixed points of Moor Farm and Kirkby Moor he used pegs to mark each position, mounted his camera on a tripod, took compass bearings for each shot and recorded the angle of tilt of the camera. I never had time to do all that, though I do use permanent marker posts at Scotton (the old heath) and on Crowle Moors. Compass readings are also useful on some sites. I rely mainly on an accurately marked map (with notes if necessary) and prints from previous surveys which enable me to pick out landscape features such as trees, hills, electricity pylons and buildings; their relationship to one another helps me to home in on an exact fixed point position. The prints also show the proportion of land and sky required. Good light is essential and I normally set the aperture to f11 and ensure that the shutter speed is appropriate for a sharp image.

The photographs from pages 9-16 have been chosen to show dramatic changes but fixed point photographs can be used to record more humdrum but essential things such as the effectiveness of bracken control at Kirkby Moor or the fluctuating density of hogweed at Kingerby Beck Meadows. All helpful stuff when you are managing nature reserves. As Peter Roworth once wrote "The value of fixed point photography is the comparisons which can be made between a series of photographs taken from the same point over several years. The more obvious changes can be seen from the before and after".

COASTAL CHANGE

Gibraltar Point

GR TF 556581 (Main Car Park), 481 hectares (1188.58 acres)

When I started work with the Lincolnshire Naturalists' Trust (now Lincolnshire Wildlife Trust) in 1965 I was based entirely at Gibraltar Point for the first 4 years; then for 7½ years I did two days a week for the Nature Conservancy (now Natural England) based at the Saltfleetby-Theddlethorpe NNR, coming back to the Trust full-time in July 1976. During these 11 or so years I took a lot of photographs of the coast, both colour and black and white; and it was some of the colour shots from this period which became useful later as fixed points.

I have chosen three photographs of Gibraltar Point which highlight some of the dramatic changes that have taken place there over a 47-year period. The view point is from the end of the "Sleeper Track".

HABITAT CHANGE

Heath's Meadows – Bratoft

GR TF 484640 5.50 hectares (13.50 acres)

I have known and looked after Heath's Meadows both as a Voluntary Reserve Manager (VRM) and a member of staff since it was purchased by the Trust in 1968. Management of these botanically rich meadows has been the same for over 40 years: take a hay cut after 15 July, which means it is normally cut during the third week of July (exceptionally as late as early August) and graze the aftermath with cattle until the end of October. No artificial fertilisers have been used during this time, but one year farmyard manure was spread on the Middle field.

The photographs are taken in the Cowcroft field, near the drain of the same name, and from approximately the same spot on each occasion. The tree in the top right-hand corner is the key static feature. Over the years a hedge has become established on the far edge of the bank which runs alongside the drain, partly obscuring the tree in the last photograph.

In spite of a static management regime, natural changes take place, perhaps the main influence being the varying lifespan of different species and weather conditions which might affect them. As the photographs show, the meadow can change quite dramatically over the years; sometimes there are many species in equal profusion whereas at other times a single one will dominate.

Kirkby Moor

GR TF 225629, 75 hectares (185.2 acres)

Management of the dry heath at Kirkby Moor has been similar over the years with natural grazing by rabbits or controlled grazing by the Trust's Hebridean sheep. Both these animals have maintained a short sward between the clumps of heather *Calluna vulgaris*. In the 1990s everyone was asking 'where has all the heather gone?'. There had been various trials and experiments to encourage new growth – but the photographs show that heather bides its time and appears to have its own natural cycle of regeneration – perhaps when weather and ground conditions are just right.

Rigsby Wood

GR TF 421762, 15.1 hectares (37.3 acres)

When the Trust purchased Rigsby Wood in 1980 it was decided to clear-fell the woodland (which was mainly pure sycamore) in the top compartment near the road to help pay for the purchase of the wood. On Higgins' Estate map of 1790 this area was marked Furze Piece and is shown as open land. This piece was probably planted in the early 1800s as 19th century maps show it as woodland. It is thought the woodland was felled during the 1st World War and then replanted with sycamore; by the time it was felled in 1980 some of the timber had reached a considerable size. This compartment also had a good show of bluebells. Felling woodland in nature reserves (or anywhere for that matter) today can cause huge controversy, but I do not remember much being said about the felling work at Rigsby. The area was replanted with oak and ash in 1981. That has now been thinned several times, much work being needed to control the regrowth of sycamore. The ash has done well, the oak less so, but eventually it will make a fine mixed woodland. The bluebells have also returned.

One of the problems of fixed point photography in woodlands is that the 'view' following clearfell can be quickly obscured by fast growing coppice regrowth, making the photographs of little use. It is important to capture a ride or wood edge to be able to show long term change.

RESTORATION

Epworth Turbary

GR SE 758036 33.2 hectares (82 acres)

Epworth Turbary is a relict raised bog. It was extensively dug for peat in the past but this had ceased by the turn of the 19th century. A lady who lived at nearby Sandhills Farm during the 1st World War told of how there were only a few trees at the NW corner of the Turbary at that time; the rest of the area was open bog – very dangerous to walk on but covered in orchids. By the time the Trust purchased the Turbary in 1958 large areas were covered with birch, and open boggy areas were confined to the east side of the reserve. It still had a good flora including cotton grass *Eriophorum,* bog rosemary *Andromeda polifolia,* and round-leaved sundew *Drosera rotundifolia.* The large heath butterfly *Coenonympha tullia* still occurred. There were also well filled ponds near the entrance.

Skyer's Drain which runs along the southern boundary of the reserve was deepened in the 1960s. That caused the water table to drop dramatically with the subsequent loss of wetland habitat and a rapid invasion of birch. In the late 1970s/ early 80s large areas of birch were cleared and ponds and channels were excavated to reach the water table and recreate wetland. Spoil from excavations was used to bury the cut birch, and the new banks which this created changed the landscape of the Turbary. For a time wetland flora and fauna thrived, but in spite of grazing by cattle and sheep, birch continued to colonise the open areas and with lower than normal rainfall over recent years the Turbary has continued to dry out with only the largest ponds and channels retaining water.

In 2009/10 Natural England paid for the felling and removal of all birch in the dried out area, and in 2010/11 for the removal of all the banks and spoil heaps, the excavated materials being stock-piled on adjacent land. New stock fencing has meant that 70% of the reserve is now grazed by cattle and sheep during the summer months to control the birch. Water levels remain critical but the wet summer of 2012 has at least brought some temporary relief to the water shortage problem.

The photographs show the dramatic change that can happen on heathland after restoration/habitat manipulation, followed by birch recolonisation and then more restoration work.

Ancaster Valley

GR SK 984434 9.7 hectares (23.9 acres)

When the Trust purchased Ancaster Valley in 1981 most of the southern end of the Valley was covered in gorse *Ulex europaeus* and young hawthorn scrub. Over the next 10 years all the gorse was removed by volunteer work parties, including a residential party from the national "Conservation Corps".

The whole of the valley is grazed by sheep from late summer to late autumn. The separate grazing enclosure - as featured in the photographs at the "toe end" of the valley - holds the sheep for a short time to ensure that the south facing bank receives the right amount of grazing to create a short turf which is essential for the pasque flower *Pulsatilla vulgaris* here at the most northerly limit of its range in Britain.

The sequence of photographs records a gradual change over a 30-year period from a dominance of scrub to open grassland in favourable condition.

RECREATION

Red Hill

GR TF 264806, 27.30 hectares (67.60 acres)

Red Hill SSSI which includes escarpment grassland, old plateau grassland and a disused quarry with an exposure of red chalk has been managed by the Trust since 1967. The plateau grassland is probably an ancient fragment of Lincolnshire Wold downland and has a rich assemblage of chalk plants. Some new fencing was put in place in 2009 and since then the whole of the SSSI has been grazed by sheep during late summer and autumn.

In 1998 the Trust purchased 23 hectares (58 acres) of arable and set-aside land plus an old quarry just across the road from the SSSI and adjacent to Badger Farm. The last crop of barley was harvested from the arable field in 1998. It had been undersown with 40% chewing's fescue *Festuca rubra subsp. commutate*, 20% red fescue *Festuca rubra* and 25% crested dog's tail *Cynosurus cristatus*. This formed the basic grassland on which to create new downland, which in retrospect had too much *Festuca* in the mix which covers the ground in a mat of grass.

There was a huge problem with ragwort *Senecio jacobaea* in the early years of the Trust's ownership, particularly on the former set-aside land. The overall spraying of some areas which was necessary to control it diminished the botanical interest for a while, but this has now recovered.

The present day botanical richness owes much to the dedication of Harry Turner who has been Voluntary Reserve Manager for this site since 2005. He collected wild flower seed from the surrounding areas including the SSSI and either sowed them directly on site or grew them on in plugs before planting in the 3 acre area which has become known as Harry's Plot. The plot has now diversified and naturalised, and for the last 7 years, with the aid of Kevin James, the Trust's Mid-Lincs Warden, seed has been collected with a flail collector and spread over the remainder of this field and a large area of the former set-aside land. Management of that consists of mid-summer grazing by cattle which later move through to the former arable land, and are then taken off in November. The whole area is then grazed by sheep until early January. The sequence of photographs shows the potential of restoring former arable to flower-rich downland over a relatively short period of time.

Robert's Field

GR TF000150, 4.00 hectares (10.00 acres)

When Ted Smith (LWT President) visited Robert's Field in 1956 it was one of the few remaining areas of natural limestone grassland in the south of the county and one of the finest butterfly sites with 2 species, pearl-bordered fritillary *Boloria euphrosyne* and silver washed fritillary *Argynnis paphia,* now extinct in the county.

The Forestry Commission obtained a 999 year lease on the land in the 1960s with the intention of planting the whole area with Scots pine, but were persuaded by the Trust to leave 0.4 hectares (1 acre) unplanted. This small area left unmanaged deteriorated quite rapidly and by 1980 was covered in thick tussocky grass with invading Scots pine and hawthorn scrub. In 1983 the Trust started to manage this small area by agreement with the Commission, mowing the grassland annually until 1991 when the Commission transferred the remainder of the 999 year lease of the whole site to the Trust. Mowing had saved the grassland, even without removing the cut litter, and by 1987 there was quite a good sward and characteristic limestone plants had started to appear.

In 1993 the Trust embarked on an ambitious plan to fell the Scots pine and restore the whole area to limestone grassland. Phase 1 felling in the northern half of the site was completed in March 1994 and the stumps were removed and either burnt or buried. The area was then levelled and green hay from the existing small area of grassland and hay from other local sources was spread on the land later that year and again in 1995. Many Trust volunteers were engaged in this work which also involved hand pulling thousands of thistles. In spite of a difficult start, by the summer of 1997 the combination of mowing/baling and winter grazing by sheep had produced an acceptable sward.

Phase 2 felling on the southern half of the site was carried out in February 1996. By this time, Dave Vandome, the Trust's VRM, had attracted the interest and help of a local farmer, the late John Machin, who loaned a tractor and trailer to collect root debris after the area was levelled, and later sprayed off an infestation of sterile brome *Bromus sterillis* which had taken over the site by the spring of 1997. Green hay cut from the Phase 1 area, Little Warren RNR and a small private meadow, was then spread by volunteers and turned with a spreader by John Machin to scatter the seed. What was left was eventually baled and taken off site. By September there was an even covering of grass everywhere.

Once the grassland was established, cutting for hay with the aftermath grazed by sheep, was the main form of management, but over the last 2-3 years a more traditional form of limestone grassland management consisting of autumn and winter grazing with sheep has been tried. It is hoped this will allow a more natural sward to develop with some grassy tussocks and the odd patch of scrub, the kind of habitat which existed in the 1950s.

This photographic sequence perhaps highlights most of all the benefit of taking a fixed point photography record. The transformation of a pine plantation to limestone grassland in twelve years is one of those ‘if I hadn’t seen it with my own eyes I wouldn’t have believed it’ moments that can only truly be demonstrated through a pictorial record. The Trust’s restoration aims have been well fulfilled – it is now a superb piece of limestone grassland and an important landscape feature.

CONCLUSION

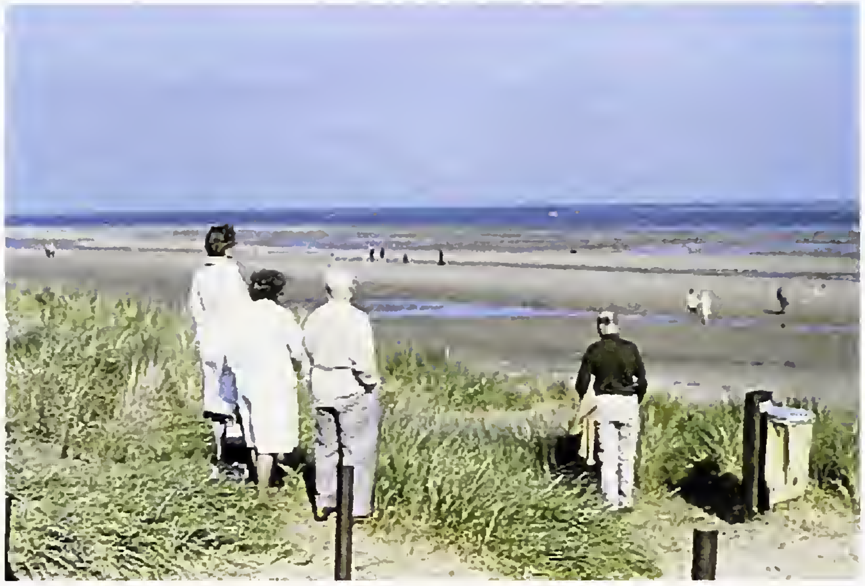
I started by taking photographs of reserves in quite a random way and still do when I see a good view. It was only later I realised that some of my early shots could be of use in recording habitat change and I went on from there to develop my own version of a fixed point photograph recording system based on Peter Roworth’s earlier work.

Being able to demonstrate that management is going in the right direction is also very useful. The records of bracken reduction and heather spread at Kirkby Moor and the reduction of scrub at Ancaster Valley show slow but long-term change due to persistent management effort. It can also show that woodlands regenerate quite quickly after felling, and Epworth is an example where drastic management heals quickly.

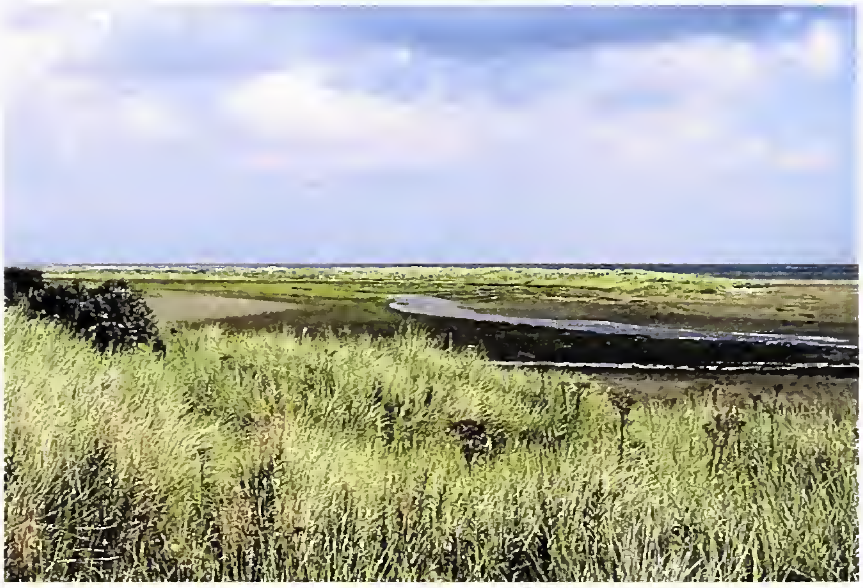
The meadow sequences from Heath’s Meadows have been revealing. Despite a very stable management regime, the meadows never quite look the same from one year to the next. Fixed point photography at this level is useful in giving an overview, but really what is needed in many cases is a botanical survey to record more detailed changes.

I must have hundreds of images now, perhaps a quarter of the total still on film in the form of colour slides. Digital images are already on two separate hard drives stored in separate places and a third storage area needs establishing at Trust HQ. The aim now must be to re-draw the maps adding appropriate notes which are legible to everyone so they can find my fixed points again in the future.

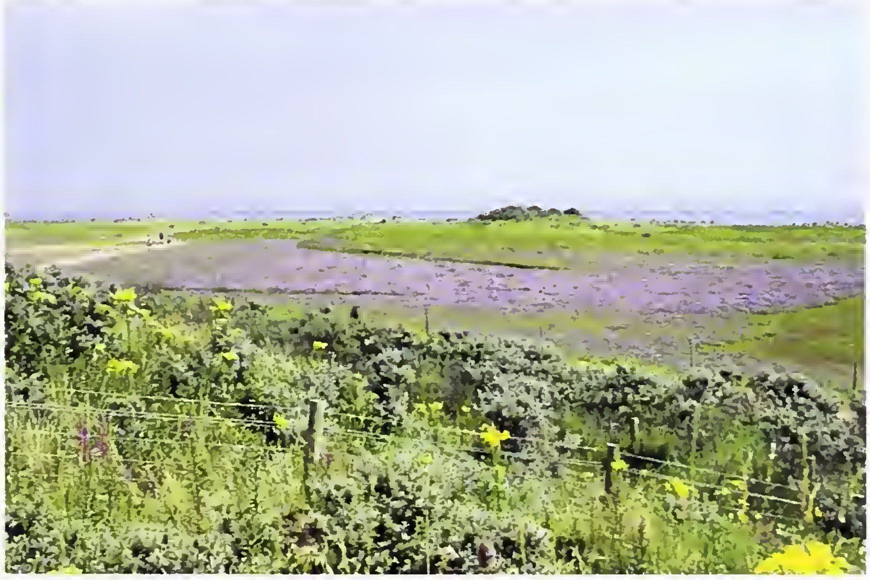
GIBRALTAR POINT
Coastal Change



1965: I took this photo in my first year with the Trust. The iron posts in the foreground are the tops of scaffolding used as anti-tank defences in the 2nd World War, now mostly buried under a mature sand dune. Beyond is an open sandy shore.



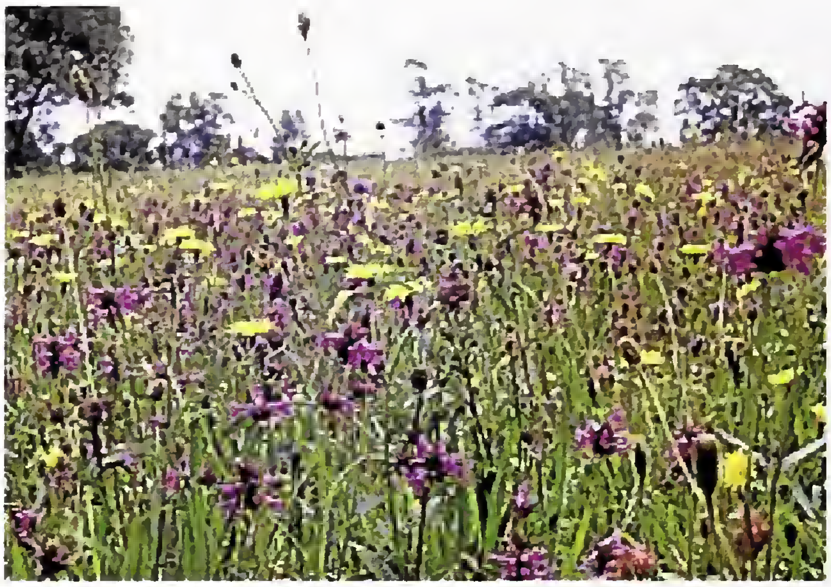
1984: By the time this second photograph was taken a complete change had taken place with a newly developing sand dune where there was once a sandy ridge and the beginning of a saltmarsh between it and the old dune, where sea buckthorn is beginning to become established. The new dune out on the shore was to develop further in the late 1980s with a twin ridge forming at its southern end, but by 1993 most of the main ridge had been washed away leaving the southern inner 'twin' to survive and regrow.



2012: It was early August when this picture was taken. Erosion (unseen here) is taking place again along the seaward edge of the ridge. A patch of sea-buckthorn survives but it and the ridge will probably disappear entirely over the next few years and a new dune will form a little further inland, probably swamping the sea lavender seen here at its best.

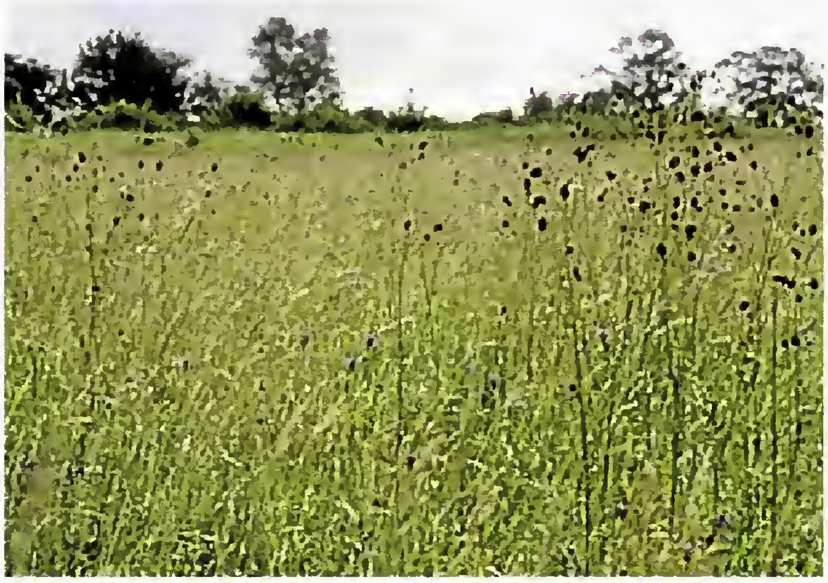
HEATH'S MEADOWS – BRATOFT

Habitat Change

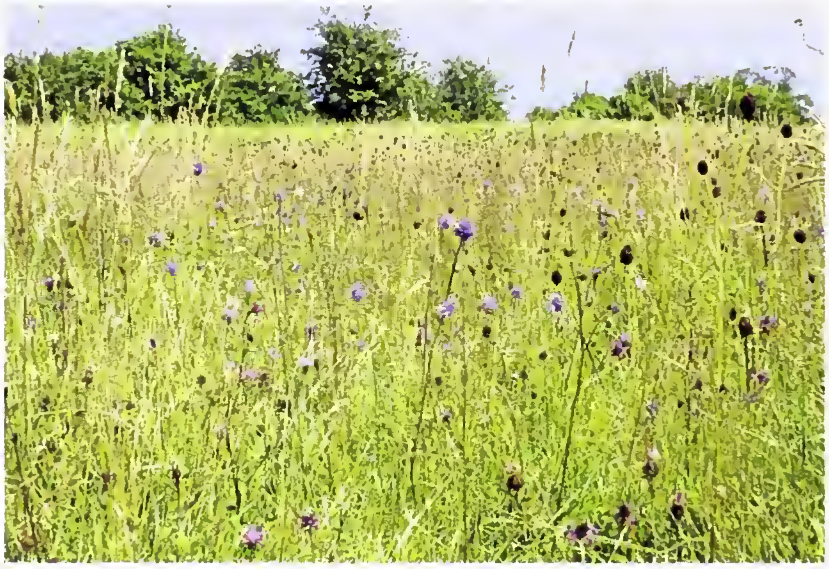


The tree in the top right-hand corner is the key static feature in each photograph.

1974: This is clearly a year for all species, but betony *Stachys afficinalis* and rough hawkbit *Leantadan hispidus* dominate.

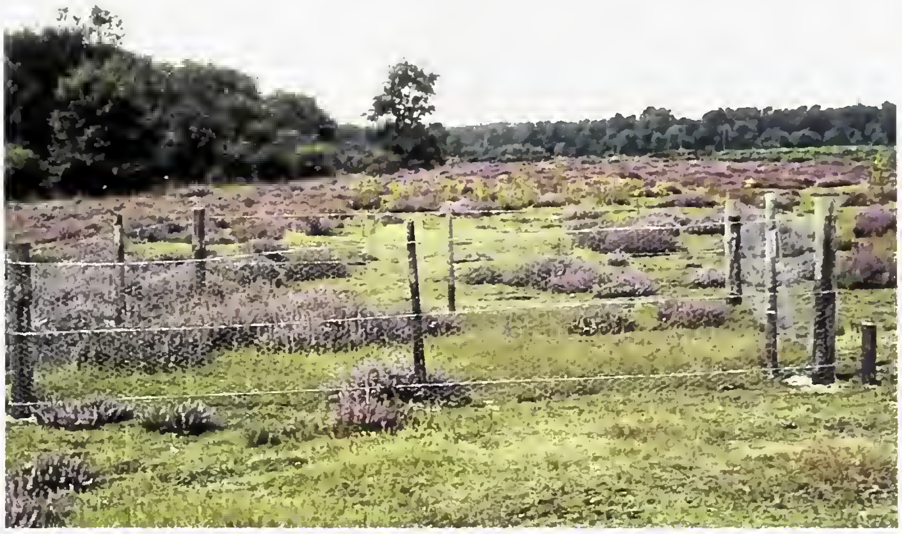


1994: Initially a worrying year with only great burnet *Sanguisarba afficinalis* making a show with grasses dominating. All the expected species could be found in the sward, but just not flowering very well that year.

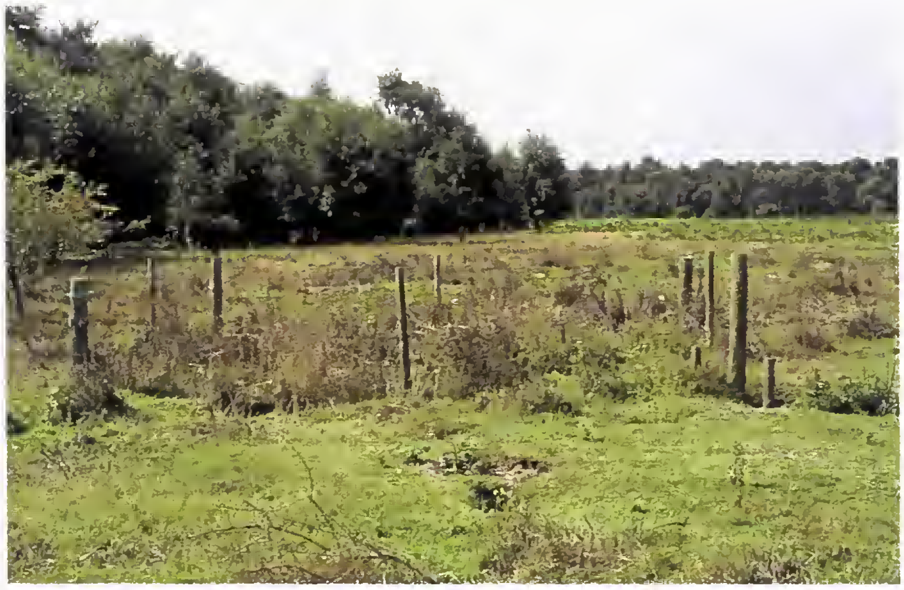


2012: Parts of this meadow have become a little wetter in places encouraging an increase in devil's bit scabious *Succisa pratensis* seen here, there is also a good variety of other species in the photograph including black knapweed *Centaurea nigra*, great burnet and betony. There was also a superb showing of dyer's greeweed *Genista tinctaria* earlier in the summer in drier areas.

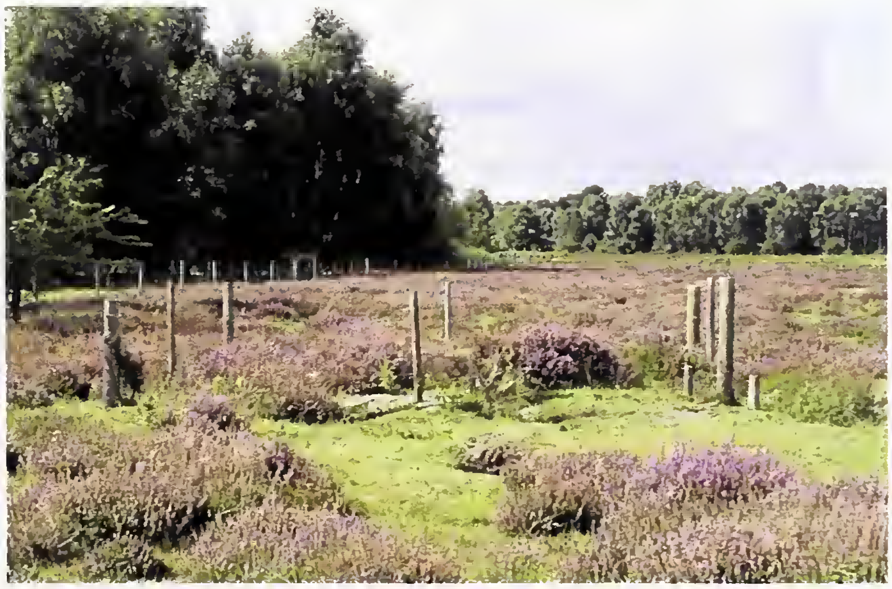
KIRKBY MOOR
Habitat Change



1981: One of Peter Roworth's photographs and one of the original "fixed points" he set up that year, together with the exclosure in the foreground to prevent rabbit grazing. The photograph shows heather in abundance.

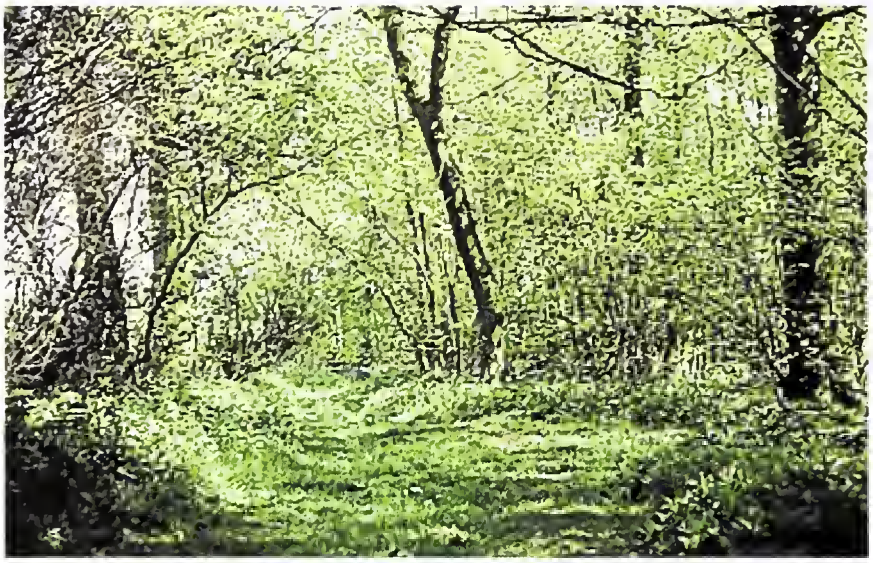


2001: This second shot, taken at the end of its declining years, shows remnants of heather scattered across the heath and in the background bracken has increased.

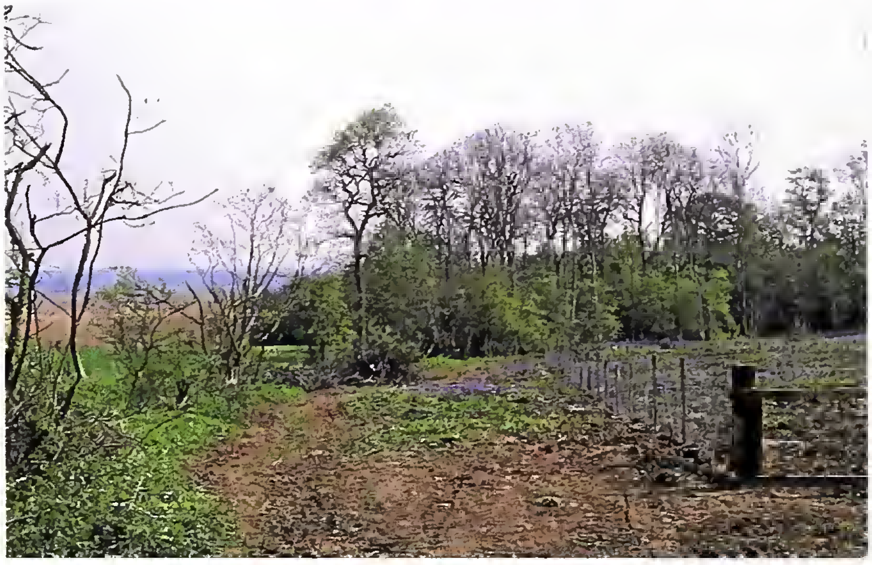


2009: By 2004 however, there were seedling and young heather plants everywhere and this fixed point taken three years ago shows heather back to its former glory. In the background too, bracken is on the retreat; this is due to large-scale control measures which started in 1998.

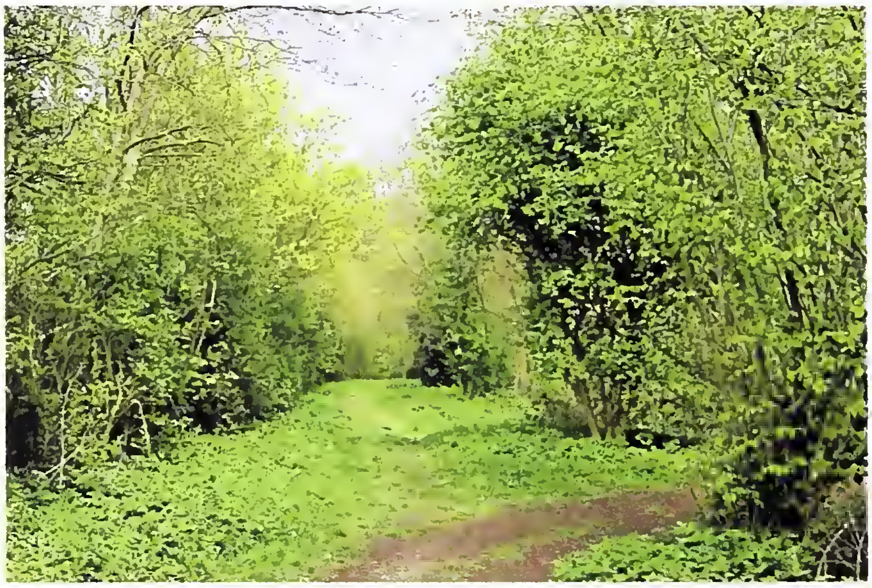
RIGSBY WOOD
Habitat Change



1980: Entrance to the wood before felling took place.



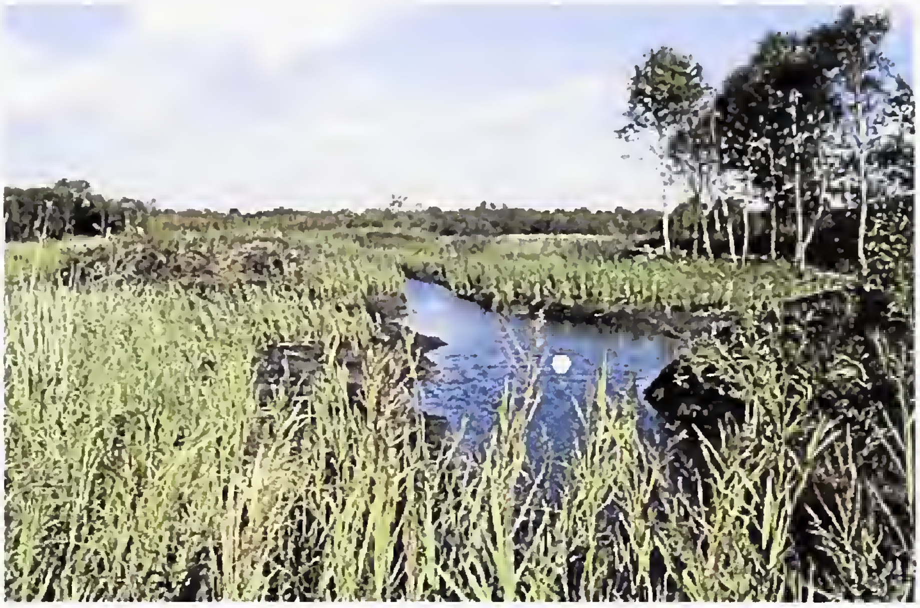
1982: The same view a year after planting showing the dramatic change to the landscape that felling brings.



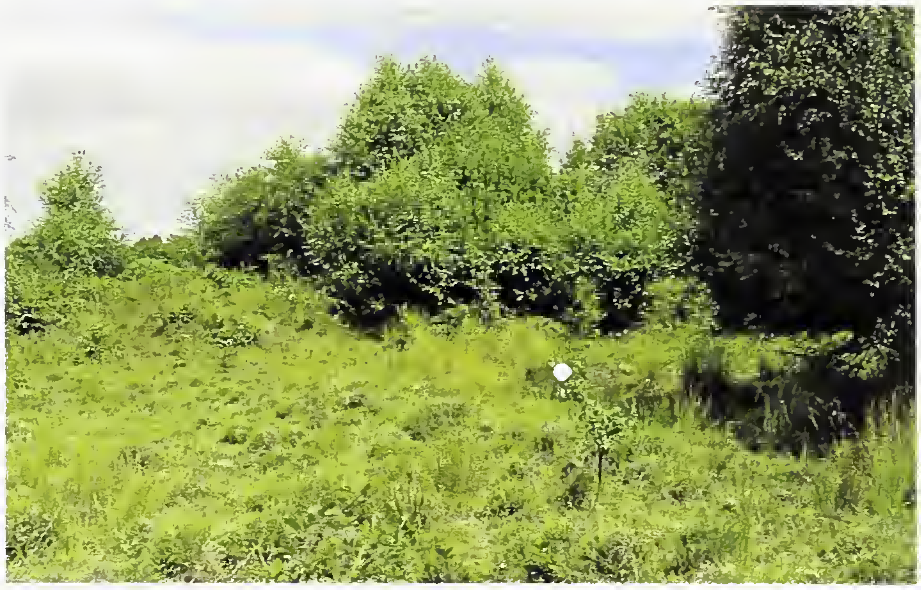
2010: The entrance as it looked 2 years ago, the woodland gradually maturing and returning to its former grandeur.

EPWORTH TURBARY

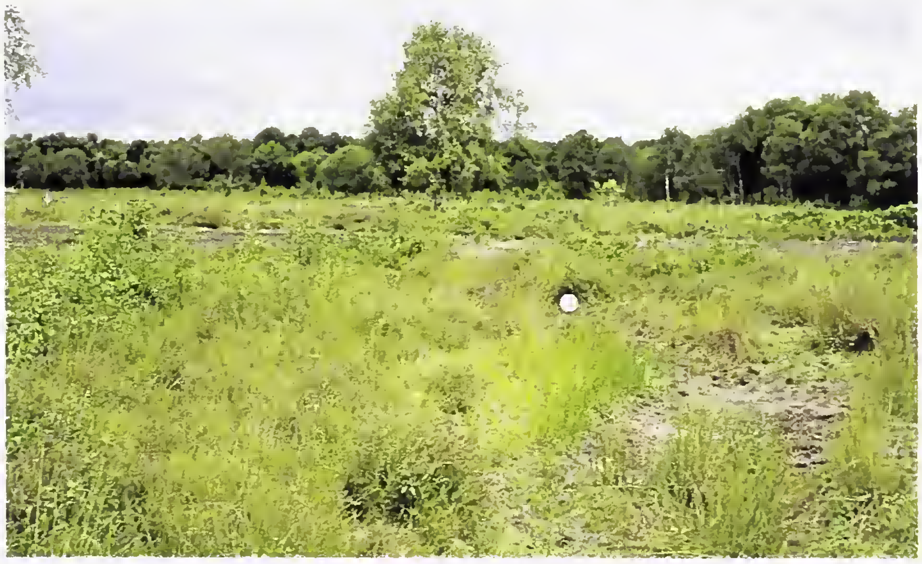
Restoration



1982: This photograph, taken by Geoff Trinder, shows a recently excavated channel and the material which forms the bank on the left of the photograph. Note the white spot which acts as a reference point in each photograph.

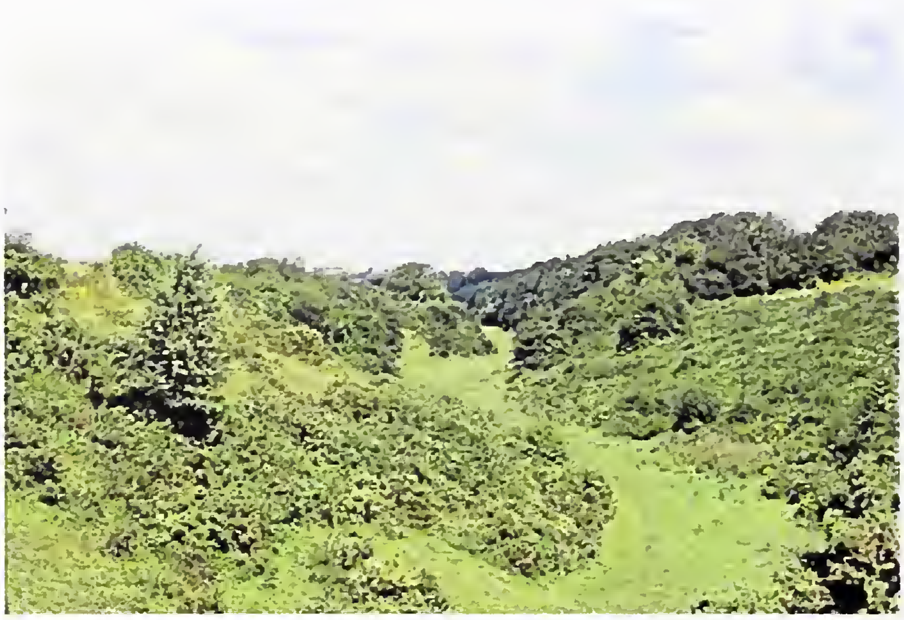


2005: The same area, completely unrecognisable. The only consistent feature is the bank, just discernible on the left-hand side. The channel is hidden under the edge of the birch trees.

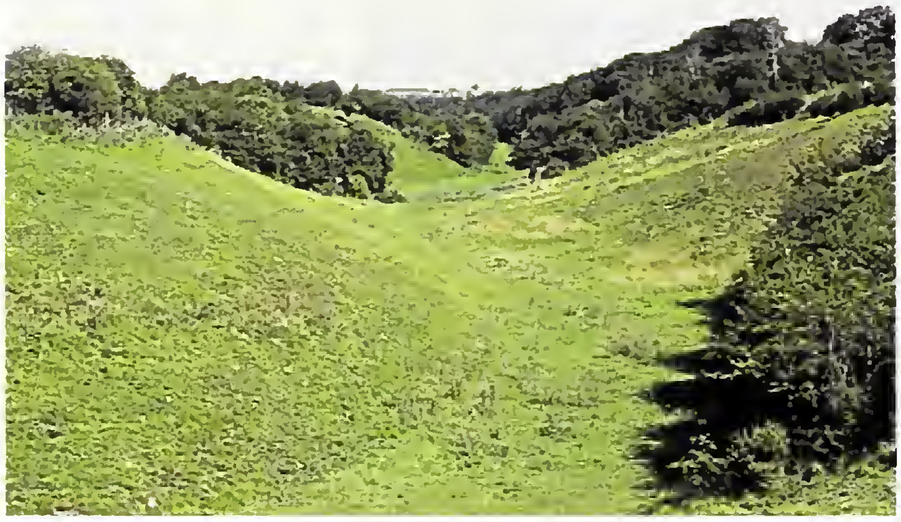


2011: Birch and banks cleared, and a patch of bare earth on the left reveals where the bank once stood. Sadly the channel is dry and the low water table problem remains unsolved.

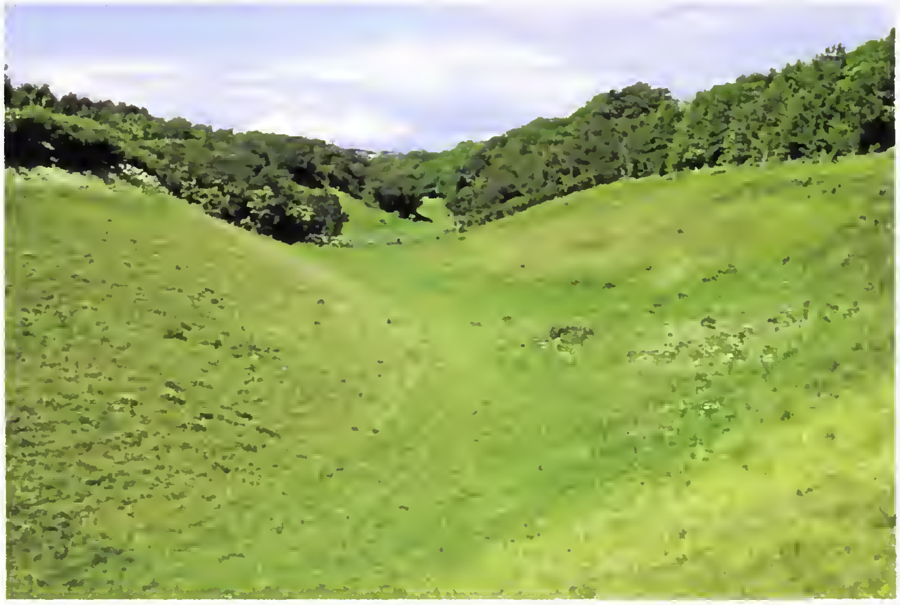
ANCASTER VALLEY
Restoration



1981: The southern end of the valley as it was when purchased, covered in scrub.

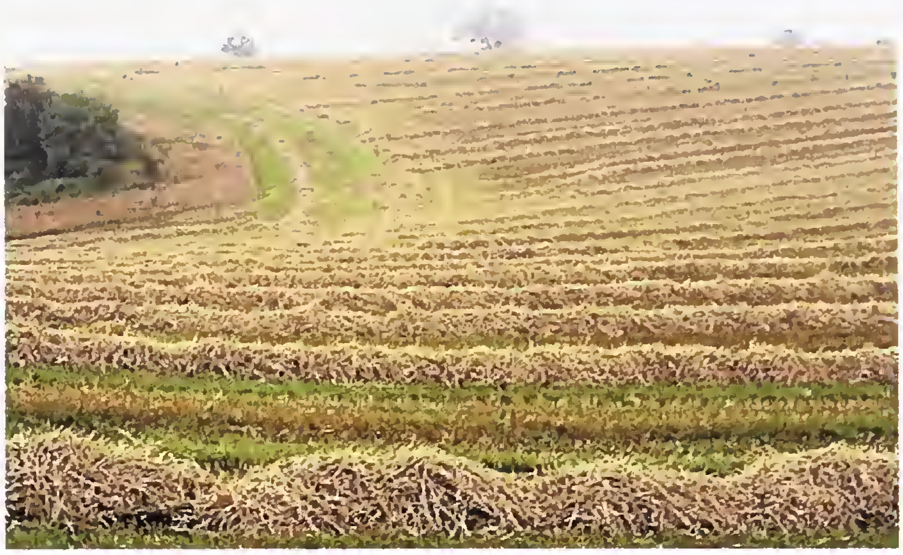


1992: The east bank at the right was cleared by the Conservation Corps in 1985. The large block of hawthorn scrub at the bottom right hand corner had been completely cleared by 2002.

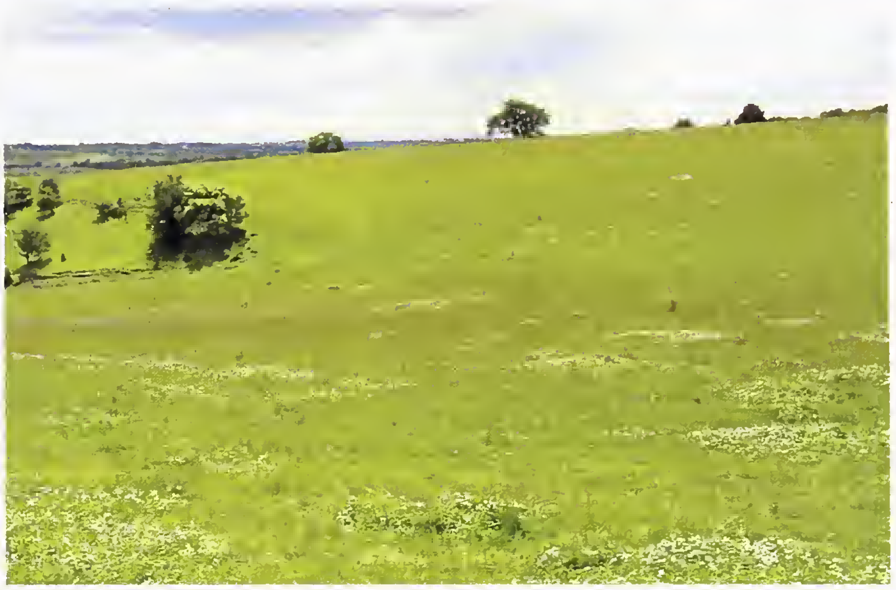


2011: The Valley as it is today.

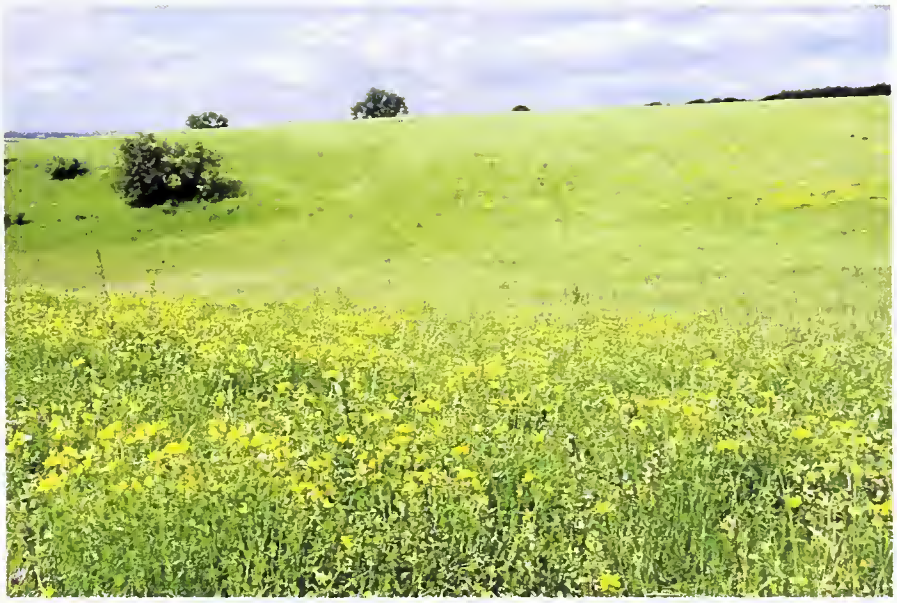
RED HILL
Recreation



1998: The last crop of barley. The trees on the horizon and a wedge of scrubby land on the left are the main reference points.



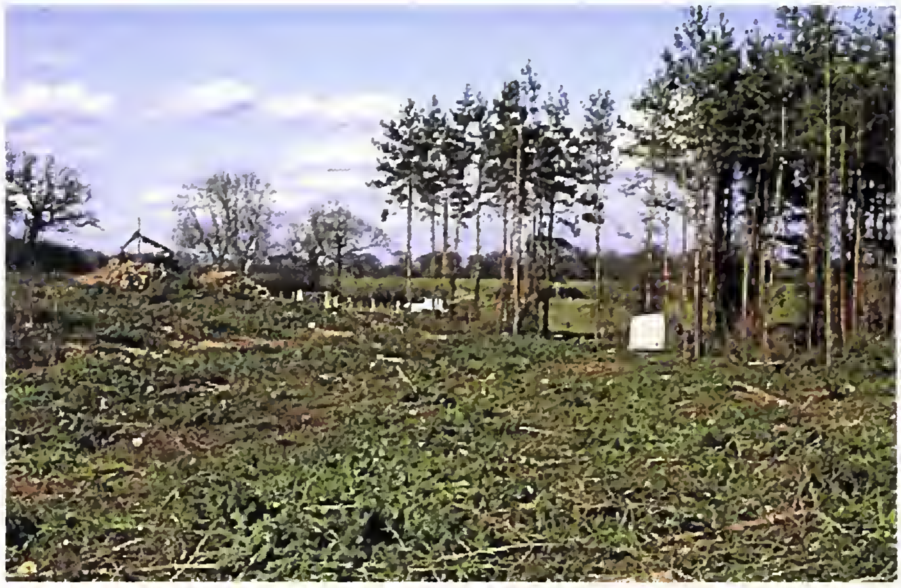
2004: The flower heads of red fescue can be seen as well as lots of white clover *Trifolium repens* which dominated for a while. The clover seed may have lain dormant in the soil for many years.



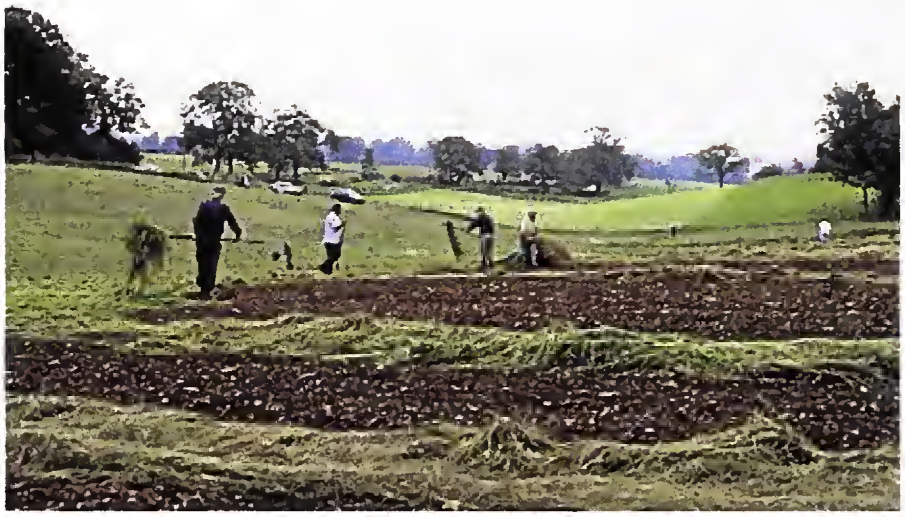
2010: Birdsfoot trefoil *Lotus corniculatus* in the foreground in this photograph taken slightly out of line on 15 June to get a better photograph.

ROBERT'S FIELD
Recreation

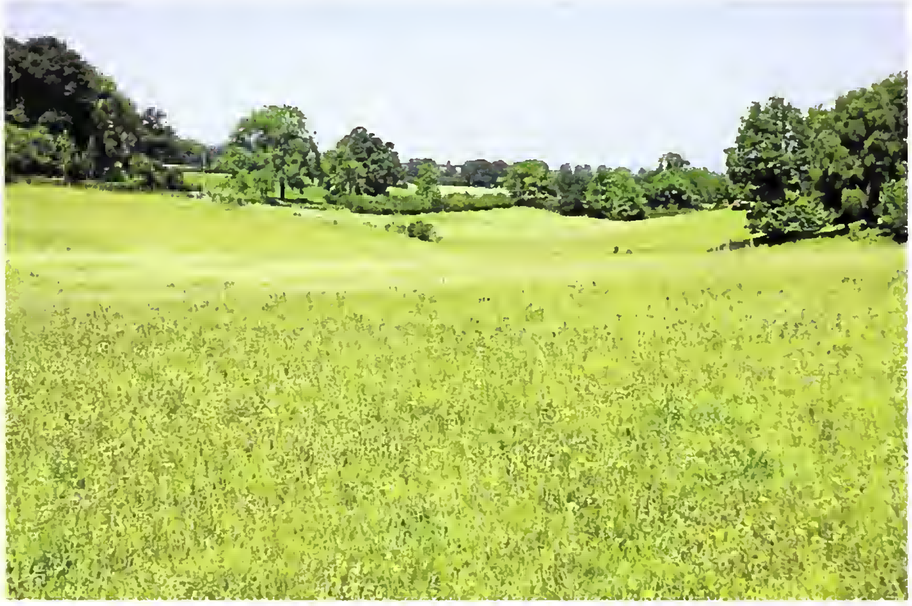
The key to all three views is the group of trees at the left-hand edge of each photograph.



1996: Tree felling in the Phase 2 area. Phase 1 can just be seen beyond the trees



1997: Volunteers spreading green hay on 17 July 1997 with Phase 1 in the background.



2009: Twelve years later well-established limestone grassland.

FIELD MEETINGS 2011

WILSFORD HEATH QUARRY SSSI, NR ANCASTER.

17 April 2011 SK985413

LNU meeting to this private site courtesy of Ben Lyte led by Brian Hedley and attended by 25 people. A lovely sunny, warm and dry spring day produced the following sightings

Plants (some not in flower) included barren strawberry, wood anemone, yellow-wort, milkwort, carline thistle, heath speedwell, slender speedwell and a narrow-petalled form of lesser periwinkle (introduced), wall lettuce, black spleenwort, spurge-laurel, autumn gentian and hairy violet. There were nine butterflies species, and the waved umber moth and two bee-flies also appeared.

Among the fungi, there were King Alfred's cakes *Daldinia concentrica* , a morel species, Jew's ear, common eyelash and stump puff-ball.

It was a good day for herptiles including great crested newt, smooth newt, common toad and common lizard.

Seven mammals were recorded, including muntjac, roe deer and fox.

35 bird species including tawny owl, buzzard, nuthatch, marsh tit, fieldfare, treecreeper, bullfinch and jay.

PRIORY FARM, NR BINBROOK

15 May 2011 TF193 943

LNU field meeting in generally overcast and windy conditions led by Brian Hedley and attended by 17 people.

Many thanks to Chris Dowse of Sutton Estates for allowing the visit.

Over 150 plant species recorded including blunt-flowered rush, water avens, lesser water parsnip, brown sedge, great horsetail and two very large small-leaved lime pollards.

Forty-one bird species noted including a tree sparrow colony, buzzards, lapwing, cuckoo and corn bunting.

A beetle list of 25 species from Charlie Barnes included lesser stag beetle:

The cock's-foot micro-moth was added to common geometers recorded.

Sharp-eyed observers found the eggs of the orange-tip butterfly, larvae of peacock, and adults of common blue.

A mating pair of bronze shield bugs *Eysarcoris fabricii* attracted interest.

Five mammal species noted including brown hare.

PARK FARM, GREAT EAU

19 June 2011TF453855

Grassland and Great Eau, led by Chris J Manning

Hosted by Lindsey Marsh Drainage Board in conjunction with local landowners. The fields are against the Great Eau and within the Lincolnshire Coastal Grazing Marsh target area, but have not previously been surveyed.

Flora of note included: corn parsley *Petroselinum segetum* and knotted hedge-parsley,*Torilis nodosa* growing on the recently reprofiled bank of the Great Eau. Whorl-grass *Catabrosa aquatica* in the Board maintained Inlet Drain and meadow barley *Hordeum secalinum* in the grassland, Meadow Barley is an indicator species of old grassland.

Twenty species of beetles were recorded including *Hippodamia variegata* (*Coccinellidae)* which appears to be increasing since the 1990's, and the fourth Lincolnshire record for *Amalorrhynchus melanarius (Curculionidae)* a southern species on the northern edge of its range in Lincolnshire. The lower temperatures and overcast conditions almost certainly limited the number of invertebrates seen.

SOUTH FARM, THURLBY

3 July 2011 SK907 614

LNU field meeting led by Brian Hedley to South Farm, Thurlby, in hot and dry weather and attended by 12 people.
A lovely 'old style' farm with wildlife very much in mind. Situated alongside the River Witham and comprising mainly pasture (including ridge and furrow areas and some reinstated meadows) grazed by a herd of Lincoln reds and some horses.

A very good plant list was made including flowering-rush, bristle club-rush, water dock, meadow barley, water chickweed, great burnet, pignut, ladies bedstraw, marsh woundwort, bristle club-rush, musk mallow and hoary plantain. A large specimen of sulphur polypore was noted on a pondside willow.

Eleven species of butterflies were noted including gatekeeper, red admiral, comma and good numbers of small tortoiseshell, ringlet and meadow brown. Moths included silver Y, heart and dart, cinnabar, light emerald, brown china-mark and hundreds of grass veneers. The River Witham produced seven dragonfly/ damselfly species including brown hawker, emperor, emerald damselfly and hundreds of banded demoiselles. A good list of beetles (especially those associated with dung) was compiled by Charlie Barnes including *Crepidodera plutus* (4th record for South Lincs) and *Isochus sequensi* (needs confirming but likely 1st record for South Lincs and a Red Data Book species). Other invertebrates included Roesel's bush-cricket and very good numbers of meadow grasshoppers and various bumblebees.

Forty eight bird species were noted including buzzards, tree sparrow, barn owl, yellow wagtail, treecreeper, bullfinch and a pair of spotted flycatchers. Common frogs were frequent and a grass snake was seen close to the river.

ALKBOROUGH FLATS

13.August.2011

Attended by 5 people in total.Included moth and bat session.

A good total of 67 species of birds included 200+ shelduck, 8 little egrets, 3 spoonbills, 4 marsh harriers, 30 avocets, 120+ bar-tailed godwits, 45 yellow wagtails and 60+ linnets.

Sightings or signs of 11 mammal species were gathered during the day, including a noctule bat and a Daubenton's bat.

A ruddy darter was recorded among commoner species.

10 species of butterfly included small heath and brown argus.

Only 10 species of moths were attracted, but included hundreds of water veneers, small members of the pyralid family.

Bees comprised four species of bumble bees, three solitary species including the leaf-cutter *Megachile centuncularis* and the brood parasite *Sphecodes ephippius*, while wasps were represented by the social common wasp, 2 digger wasps and the potter wasp> *Ancistrocerus parietum.*
37 species of beetles comprised 11 ground beetles including *Pterostichus vernalis* (10th record for North Lincs), 7 ladybirds including Adonis ladybird (Notable B), 7 leaf beetles and 6 weevils including *Malvapion malvae* (9th record for North Lincs).

Cicadella viridis a large green froghopper was frequent in marshy areas on site.

Bryophytes recorded included several new for the 10km square, including *Bryum moravicum.*

Water plants included greater tussock-sedge *Carex paniculata*, small pondweed *Potamogeton berchtoldii,* brackish water-crowfoot *Ranunculus baudotii* and, a real surprise, common cotton-grass *Eriophorum angustifolium.*

RISEHOLME COLLEGE, LNCOLN

24 September 2011 SK981 756

LNU Meeting led by Brian Hedley and Colin Smith and attended by 14 people during course of afternoon and evening (moth and bat session).
Despite the warm and dry evening moths were fairly scarce with only about 15 species noted including copper underwing, sallow and common marbled carpet. Three bat species were recorded feeding in the lake area (Common Pipistrelle, Soprano Pipistrelle and Daubenton's) with Sopranos very numerous (10+). The church there obviously held a bat roost due to the frequent droppings present. Other mammals noted included two hedgehogs, a weasel and a common shrew. A young common frog was also found.

Botanically, there was a mix of native and ornamental species with about 200 species noted including small-flowered balsam, thorn apple, lesser water-parsnip mare's-tail, hop and wall lettuce. Unfortunately the northern part of the lake had abundant New Zealand pygmy-weed present. A Judas tree in the car park was interesting.

Invertebrates included three butterfly species with very good numbers of commas noted on water mint around the lake edge. Two southern hawker, ten migrant hawkers and at least five common darters were present. Both green and red-legged (forest bug) shieldbugs were found near the lake. Bumblebees (mainly red-tailed, buff-tailed and common carder) were frequent on a large stand of verbena near the car park. Some huge swan mussels were noted in the lake.

About 40 bird species were recorded including a very noisy kingfisher, a siskin, two buzzards, tawny owl and at least five chiffchaffs and treecreepers.

SECRETARY'S REPORT

Charlie Barnes

The LNU goes from strength to strength with over 20 new members joining during the year – a significant proportion of which were recruited at the LNUs first attendance of the Woodlands Organic Farm Open Day, something which we hope to repeat in 2012.

A lot of work has been going on behind the scenes in the past year involving particularly the Collections Working Party and the Botany Project, and the LNU has been well represented on the various meetings that take place in the county, for instance on the Lincolnshire Biodiversity Partnership Steering Group, Lincolnshire Wildlife Trust Biodiversity Team and the Lincolnshire Bird Club.

The Executive Committee also met four times over the course of the year and the programme of summer field meetings covered a variety of habitats and sites across Lincolnshire. The field meetings were well received, with attendance averaging 14 over the summer. The winter indoor meetings were also to their usual standard with a good audience.

INDOOR MEETINGS IN 2011

15th January	**Dr. Naomi Sykes 'Extinctions and Invasions: A Social History of British Fauna'**
12th February	**Recorders' Meeting**
12th March	**Annual General Meeting**
26th November	**Andy Chick 'Lincolnshire Peregrines'**

Contributing to *The Lincolnshire Naturalist*

We are constantly on the lookout for full length articles or short notes, even a few lines which can be useful space fillers, on any aspect of our natural history, current or historic. Consider a note in *The Lincolnshire Naturalist* for any new or significant observations.

Articles should be typed. It would help the editor tremendously if they could either be e-mailed or sent on CD or floppy disk with accompanying paper copy, in Word© or Word Perfect© format. Drawings, colour or black & white photographs, colour transparencies or negatives (please include a print) can be included. If you submit your own photographs, take them or scan them at a resolution of at least 200 dots per inch and at a size equal to or larger than the size they will be printed at (approximately 11.5x7.5cm). Colour illustration may be rendered to black and white. Please give a caption and the name of the person who took the photo/image. Illustrations will be returned and edited text resubmitted to the author for approval and proof-reading before publication.

Convention adopted for names - Latin names should be *italicised*, **not** (bracketed) nor underlined and should follow the English name (where applicable) with no separating comma. English names should start with lower case letters unless incorporating other names warranting capitalisation (eg Brandt's bat).

References to journals and books should please be as below. Please note and use the capitalization and italic convention.

WOODRUFFE-PEACOCK, Rev E.A., 1900. The Lincolnshire Naturalists at Freiston. *The Naturalist*, **25**: 141-144.

DUDDINGTON, J. & JOHNSON, R. 1983. *The Butterflies and Larger Moths of Lincolnshire and South Humberside*. Lincolnshire Naturalists' Union. Lincoln. 299pp.

THE LINCOLNSHIRE NATURALIST

including
Transactions of the Lincolnshire Naturalists' Union
for 2011
Volume 28, Part 1, 2012

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Cover picture Gibraltar Point (Photo: Barrie Wilkinson)